

IOWA STATE UNIVERSITY

Digital Repository

Retrospective Theses and Dissertations

Iowa State University Capstones, Theses and
Dissertations

1985

Objective measures of elderly women's economic well-being

Jane Menninga Schuchardt
Iowa State University

Follow this and additional works at: <https://lib.dr.iastate.edu/rtd>



Part of the [Family, Life Course, and Society Commons](#), and the [Gerontology Commons](#)

Recommended Citation

Schuchardt, Jane Menninga, "Objective measures of elderly women's economic well-being " (1985). *Retrospective Theses and Dissertations*. 12101.
<https://lib.dr.iastate.edu/rtd/12101>

This Dissertation is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

**University
Microfilms
International**

300 N. Zeeb Road
Ann Arbor, MI 48106

8524691

Schuchardt, Jane Menninga

OBJECTIVE MEASURES OF ELDERLY WOMEN'S ECONOMIC WELL-BEING

Iowa State University

Ph.D. 1985

University
Microfilms
International 300 N. Zeeb Road, Ann Arbor, MI 48106

Copyright 1985

by

Schuchardt, Jane Menninga

All Rights Reserved

Objective measures of elderly women's
economic well-being

by

Jane Menninga Schuchardt

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Major: Family Environment

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa
1985

Copyright © Jane Menninga Schuchardt, 1985. All rights reserved.

© 1985

JANE MENNINGA SCHUCHARDT

All Rights Reserved

TABLE OF CONTENTS

	Page
INTRODUCTION	1
Data and Analytical Procedure	3
Explanation of Dissertation Format	4
CONCEPTUAL BACKGROUND AND REVIEW OF LITERATURE	6
Measurement of Economic Well-Being	6
Elderly Women and Economic Well-Being	18
Statement of Research Issues	25
SECTION I. THE EFFECT OF LABOR FORCE ATTACHMENT ON ELDERLY WOMEN'S CONTRIBUTION TO THEIR ECONOMIC WELL-BEING	27
Introduction	27
Background of the Study	28
The Sample	31
Definitions of the Variables	35
The Analysis	41
Discussion	47
SECTION II. ELDERLY WOMEN AS RECIPIENTS OF FINANCIAL TRANSFERS FROM FAMILY MEMBERS	50
Introduction	50
Procedure	53
Results	57
Discussion	67
SUMMARY	69
Labor Force Attachment	69
Family Financial Transfers	71
Recommendations and Implications	72
REFERENCES CITED	79
APPENDIX	85
Section I. Zero-order Correlation Matrix	86
Section II. Zero-order Correlation Matrix	87

LIST OF TABLES

	Page
SECTION I	
Table 1. Descriptive statistics on woman's own contribution ratio and independent variables	37
Table 2. U.S. life expectancy of elderly women	40
Table 3. Regression analysis of woman's own contribution ratio on selected independent variables	43
SECTION II	
Table 1. Mean comparison of selected variables describing nonrecipients, recipients of family financial transfers	61
Table 2. Cross-tabulation of nonrecipient, recipient subsamples by selected categorical variables	62
Table 3. Regression analysis of financial transfers on selected independent variables	65

INTRODUCTION

Though the economic status of the elderly has improved substantially in the last few decades, elderly women, especially widows, still are among the most disadvantaged in the United States. Part of the blame is largely uncontrollable -- women, many of whom are traditionally dependent on men, live longer. At age 65, women can expect to live about 4 years longer than men (U.S. Bureau of the Census, 1983b). By age 75, the life expectancy age gap decreases by only a few months. Consequently, the health, social, and economic problems of the elderly are mostly women's problems.

Much popular literature has called into public view the inadequacies of Social Security and pension benefits as factors in the elderly woman's economic predicament. Public policy changes promise improvement. However, the hope of making those promises reality are dimmed by pressures on public transfer systems. These include extended life spans of U.S. citizens, an increased number of elderly people as a proportion of the population, and unpredictable economic swings.

Historically, financial security during the last life cycle stage was a private responsibility. Now, after several years of public support flowing to the elderly, the pendulum is swinging back somewhat to the private arena. The purpose of this research is to investigate two private mechanisms whereby the relative economic position of elderly women in society might be improved.

The first, labor force attachment, implies the accumulation of assets, Social Security credits and pension benefits in a woman's own name due to her own efforts. Many contemporary women, regardless of marital status, have realized the need to establish personal financial independence. Researchers have not substantiated fulfillment of that need as a significant contributor of economic well-being in retirement.

The second private mechanism under consideration, financial support within the family structure, has drawn the attention of theorists Moon (1977, 1983) Becker (1981) and Boulding (1973). Yet, little is known about the magnitude of these transfers and characteristics of recipients.

Despite the intellectual acknowledgment of the contribution of prior labor force attachment and family financial transfers to the economic well-being of elderly persons, there is limited empirical research available on these topics, especially as applied to the elderly woman. Therefore, the objectives of this study are twofold:

- 1) to substantiate the impact of a woman's labor force attachment on her contribution to economic well-being in retirement. Work by Moon (1977) provides the theoretical framework for this investigation; and

- 2) to develop a model to predict the characteristics of an elderly woman as recipient of financial transfers from family members.

Theoretical work by Boulding (1973) and Becker (1981) provide the research framework.

Data and Analytical Procedure

The data used in this research are from the Social Security Administration's Longitudinal Retirement History Study. A national sample of 11,153 persons comprised of men, regardless of marital status, and women of the same ages who were nonmarried, was first interviewed in 1969. All respondents were in the cohort born in 1905-1911, or age 58-63 when first interviewed, and were re-interviewed biennially through 1979.

The data were collected to study respondents' work lives, health, living arrangements, financial resources and assets, expenditures, and retirement plans. A limitation of the data was its inability to provide a representative sample of all women in the specified age cohort.

Ireland and Schwab (1981, p. 385) report: "In the pretest stage of the study, it was discovered that married women tended to define retirement in terms of their husbands' rather than their own retirements." As a result, only nonmarried women, not those who were married, were sampled. In spite of this limitation, the data address the purposes of this study by providing information about women's labor force participation history, receipt of money transfers from family members, and financial information.

The unit of analysis is the elderly woman responding to the 1979 interviews. She was in the nonmarried category when the sample was drawn in 1969.

Regression analysis, both as a descriptive tool and for statistical inference, is employed to investigate both purposes. To examine the

contribution of labor force participation on economic well-being in retirement, multiple regression techniques quantify the impact of the major independent variable, labor force attachment, after controlling for other variables. Developing the most parsimonious regression equation is the goal.

Contrastingly, predictive power, not parsimony, guides the second analysis. The goal is to find the best linear prediction equation for receipt of financial transfers from family members.

Statistical inference, though limited due to the sample, also requires a different approach for each purpose. Hypothesis testing to determine the likelihood of a nonzero population parameter is used for the labor force participation question. The main focus for the family transfers work is on estimation of a population parameter and establishing confidence intervals.

Major definitions used in the research are:

Economic well-being: An attainable level of consumption by a family with resources currently available.

Family financial transfers: The giving of money by one related individual to another; can be across-household or within-household assistance.

Explanation of Dissertation Format

The format of this dissertation has been approved by the Graduate Faculty at Iowa State University. The research is presented in manuscript form suitable for publication in professional journals.

The dissertation consists of an introduction that outlines the research project and a review of literature pertaining to objective measures of economic well-being. Special attention is paid to objective measures of earned income, and related benefits, and family transfers.

Two manuscripts follow in Sections I and II. The first section investigates the effect of a woman's labor force participation on her contribution to economic well-being in retirement. This manuscript was written for submission to The Gerontologist. The second section studies elderly women as recipients of financial transfers from family members. It was written for submission to the Home Economics Research Journal.

The final chapter summarizes the total research and presents overall findings. Conclusions, recommendations for future research, and implications for educators, policy makers, and women themselves are included here.

CONCEPTUAL BACKGROUND AND REVIEW OF LITERATURE

Family economic welfare or well-being, as defined by Fergusson, Horwood, and Beautrais (1981, p. 716) is "the level of financial input received by the family and the transactions that are (or may be) performed on this input." In other words, it reflects the attainable level of consumption by the family with resources currently available. It is not synonymous with family material well-being, or what has already been attained.

Moon said that, in consumer economic terms,

. . . an ideal measure of economic welfare for a family is the level of satisfaction reached as measured by its utility function. However, even if such a measure were attainable, the limitations of standard consumer theory prevent comparisons of the magnitude of one family's preferences against any other family's preferences (1977, p. 11).

This review of literature provided insight into acceptable means for operationalizing economic well-being for elderly persons. One objective measure, transfers of goods, services, and money directly among family members, was singled out for inspection in depth. Finally, attention was paid to the use of these objective measures in determining the economic status of elderly women, the research group in question.

Measurement of Economic Well-Being

Years of economic deprivation among the elderly prompted legislators to come to their rescue. During the past few decades, Social Security old age benefits have significantly outpaced inflation, Medicare and Medicaid

were legislated to protect against financially devastating health care needs, and the Supplemental Security Income program ensured no elderly person's income would fall below a certain level.

Now, with the future solvency status of Social Security a matter of heated debate, Medicare in financial trouble, and the national deficit reaching unprecedented levels, Congress must make hard choices between an increased tax burden for the young or benefit cuts for the old. Some argue public transfers to the elderly are still insufficient. Others maintain the economic burden of providing benefits already promised is unbearable.

The only way of determining the effectiveness of income redistribution programs requires an adequate ranking of economic status. The need for empirical measurement of economic well-being has prompted an abundance of literature from economists (Danziger and Taussig, 1977). Most researchers concentrated on the inadequacies of the money income measure as a proxy for economic well-being and empirically tested alternatives for judging relative economic status of population segments.

Inadequacy of Income-based Methods

Kyrk, who first wrote about standards versus levels of consumption in 1923 (p. 175), said in a later work: ". . . the true economic position of families with respect to levels of consumption or savings generally attained or attainable is imperfectly indicated by their incomes for a single year" (1953, p. 86). Further, it is unlikely the elderly require

the same amount of current income as the nonelderly to achieve a given level of living.

U.S. Bureau of the Census data on money income for families provides the simplest approach for appraising the relative economic status of the elderly. In 1980, the mean money income of households in which the head was 65 or older was \$12,628 or about 63 percent of the average for all U.S. households. On first view, the elderly appear economically deprived.

Accounting for taxation, arriving at what economists call disposable income, is an obvious adjustment to the money income figure (Schulz, 1985, p. 27). The elderly enjoy certain tax breaks -- the number of personal exemptions for figuring federal (and some state) income tax is doubled; most Social Security benefits are not taxed, especially for those in lower income brackets; and property tax reductions are granted in all states. When adjusting for taxes paid on income, property, and Social Security benefits, the average per capita disposable income for elderly persons was \$6,300 in 1980 (Rich, August 19, 1983, p. A1). This compared to \$5,964 per person for the entire population.

Other data underscored the myth of the poverty stricken elderly. For example, Danziger, van der Gaag, Smolensky, and Taussig (1984a, p. 179) found the elderly in 1973 were on average 90 percent as well off as the nonelderly. Using 1972-73 Consumer Expenditure Survey data, they corrected for the following biases in the Census money data (p. 178):

- 1) Elderly pay less in personal taxes than the nonelderly at the same money income level.
- 2) Elderly own more assets than the nonelderly at the same money income level, including a disproportionate share of

assets such as equity in their own homes and consumer durables that yield nonmoney income flows.

- 3) The elderly generally live in smaller income-pooling units than do the nonelderly and usually have no childrearing expenses.
- 4) Some low-income elderly persons can save on housing and other expenses by living with their children or in other nonelderly households.

The researchers speculated that their results still underestimated the relative economic status of the elderly and that they are today "certainly at least as well off on average as the nonelderly." Danziger et al. (1984b) repeated this conclusion in another research report.

Further, experts on the economics of aging pointed out that not all income is money income. A disproportionate share of governmental in-kind income, such as food, housing, and medical service, is transferred to the elderly (Schulz, 1985, p. 27).

Consumption patterns also vary. The retired elderly have fewer work expenses. More time is available for production and consumption of nonmarket goods and services. For example, Bivens and Volker (1983) used data from the 1977 U.S. Department of Agriculture Household Food Consumption Survey to compute value added in household food preparation. Households with heads age 65-74 had a mean weekly value added of \$49.68 compared to \$35.52 for households headed by persons under 65 years (p. 113).

However, the elderly are more likely to have serious health problems that increase their consumption of medical services. Overall, the elderly use about three times more medical care per person than people under 65

years (Fuchs, 1983, p. 197). Health care costs not paid by Medicare averaged 19 percent of the elderly's total income in 1980, up 2 percent compared to 1970 ("Health Care," 1984, p. 21).

The greater adverse effect of inflation on the elderly, compared to other segments of the population, has been another point of discussion in the literature. The 1981 White House Conference on Aging (1982, p. 27) concluded that the elderly are particularly vulnerable to loss from inflation.

More recently, Clark and Sumner (1985), among others, have refuted the hypothesis that the elderly suffer disproportionately from inflationary trends. They concluded that the indexing of Social Security to the Consumer Price Index has "important implications for the impact of inflation on the well-being of the elderly" (p. 149). Since more than 90 percent of persons 65 and older receive Social Security benefits, almost all have at least one source of income that keeps up with price increases.

For the average elderly person, Social Security also is a major source of money income. Earnings account for less than one-fifth of income after age 65. After Social Security benefits, capital income such as interest and dividends are next in importance, followed by government employee pensions, private pensions, and public assistance (Fuchs, 1983, p. 203; Upp, 1983, Table 1).

If money income were adjusted adequately for all points mentioned above, its ability to judge the relative economic well-being of the elderly still would be inaccurate. The reason is the well-known problem of understating money income on household surveys. Danziger et al.

(1984a, p. 178) said elderly respondents understate money income significantly more than the nonelderly. Radner (1982, p. 20) called the reporting problem on income especially serious for the elderly. Underreporting of property income (interest, dividends, rent, royalties, and trust income) is most common, followed by underreporting of self-employment income (especially farm income).

Annuitizing Net Worth

As referenced earlier (Danziger et al., 1984a), net worth has been included in assessing economic well-being of elderly persons compared to others in the population. In a landmark study, Weisbrod and Hansen (1968) recognized the inadequacies of the single-dimensional money income measure to assess relative and absolute economic welfare. In capsulizing their income-net worth approach to measuring economic welfare, they wrote:

A unit's economic well-being or economic position should be thought of as a function of the flow of services over which it has command. This flow depends importantly on the consumer unit's current income and also on the service it receives from its assets, net of liabilities (p. 1315).

Net worth is converted into an income flow by a mathematical translation into an annuity. The annuity value is a function of the amount of net worth, the life expectancy of the consumer, and the rate of interest.

Weisbrod and Hansen stated that the income-net worth measure, recognizing it is not all-encompassing, is especially appropriate for assessing the economic welfare of the elderly. "Since older people have higher ratios of net worth to current money income, as well as shorter

life expectancies, their economic position will be most affected by the consideration of net worth" (p. 1316).

Projector and Weiss (1969) claimed the Weisbrod-Hansen measure is of limited value, since it uses an arbitrary method for allocating net worth without regard to patterns of spending and saving. They argued that this bias invalidates the use of the measure to establish eligibility for public programs or to compare consumer units of different ages.

According to the life-cycle hypothesis (Duesenberry, 1949; Friedman, M., 1957; Ando and Modigliani, 1963; Kreps, 1971), people accumulate assets to call upon during periods of lower income, such as during retirement years. Work by Mirer (1980) and Menchek and David (1983) concluded the elderly as a group fail to liquidate wealth in old age.

Friedman and Sjogren (1981), in reviewing assets of the elderly as they retire, concluded equity in the home is usually the most important form of asset. Liquid or income-producing assets are generally limited in amount.

Schulz (1985) spoke of the "locked in" nature of the housing asset. Even though four-fifths of the elderly who own homes are free of mortgage payments, many elect not to liquidate this sizable asset accumulation.

A strong bequest motive also is a factor in nonliquidation of assets (Menchik & David, 1983). In an early work, Marshall (1949) recognized this effect:

That men labor and save chiefly for the sake of their families and not for themselves, is shown by the fact that they seldom spend, after they have retired from work, more than the income that comes in from their savings, preferring to leave their stored up wealth intact for their families (p. 228).

A More Comprehensive Measure

Using measures of money income and/or annuitization of net worth to determine the elderly's economic position has limitations. A comprehensive model developed and tested by Moon (1977) more realistically assesses the capacity of older Americans to sustain consumption given all available resources.

In addition to current money income and an annual share of net worth, Moon's theoretical model considered net contributions of government, transfers among family members, and the value of leisure and nonmarket productive activities. (Intangible commodities such as proximity of residence to adult children were recognized but not included in the model due to difficulties in measurement.)

The economic welfare equation posited by Moon was:

$$W_t = (\hat{Y}_t + S_t)\lambda$$

where \hat{Y}_t estimates all current net inflows of nonproperty resources available for consumption in period t and S_t is the portion of net worth available for consumption during the period. λ indicates standardization by family size. Families with equal resources but of unequal size are not equally well off.

The components of \hat{Y}_t are:

-- earned income

-- other income, such as from pensions, annuities, and interest and dividend earnings.

-- net contribution of government. This takes into account cash transfers such as Supplemental Security Income, in-kind transfers such as food stamps, and taxes owed less tax advantages.

-- transfers of goods, services, or money directly from other family members.

-- leisure and nonmarket productive activities. Although the level of economic status usually falls when a person retires, at least some of the decrease may be offset by increased consumption of leisure time (Moon, 1977, p. 25). She recognized the difficulty in quantifying this component.

Moon used this comprehensive indicator of economic status to investigate the distributional effect of government taxes and transfers. She concluded (p. 111) the comprehensive measure had a more equal distribution, a higher median value, and in general, fell to the right of the distribution of current income. She noted families headed by women showed relatively large gains when their economic status was based on the expanded measure.

Juster (1981) presented a similar conceptual framework:

The prospective consumption stream of the elderly has at least three components: first, the elderly can consume income received during the course of their remaining lifetime, whether from employment or from transfer payments; second, they can consume capital assets, which in part have been accumulated for that purpose; and third, they can be thought of as having potential consumption arising from the possibility of intrafamily transfers (pp. 2-3).

Of particular interest for this writing was the effect of direct family transfers on the economic well-being of the elderly.

Family Transfers as an Objective Measure of Economic Well-Being

Many authors (Kreps, 1965; Bivens, 1976) addressed the impact of the explosive growth of government transfers, especially to maintain a level of acceptable living for the nation's elderly, on the direct giving of cash, food, and housing among family members. Lampman and Smeeding (1983, p. 45) concluded "interfamily transfers (from one household to another) was quantitatively more important than governmental transfers . . . 30 years ago, but is now only half as great."

The shift of responsibility from family to society was spawned by many factors, including increased family mobility, changing housing patterns, and more labor force participation by women (Bivens, 1976, p. 76). Changes in how America cares for its dependent elderly have reached beyond government transfers. Limitations of the family as a support system have encouraged a service industry and professional corps charged with providing regular meals, housekeeping services, and institutional care.

Due to limited research on transfers among families, it is not known just how far the pendulum has swung in favor of social responsibility. However, theorists and empiricists alike recognize such transfers as an important component of economic well-being for Americans.

As theorized by Boulding (1973), transfers of money, goods, and services among related individuals (either within or across households) are part of the grants economy. A grant, as opposed to the two-way nature of an exchange, involves the one-way transfer of anything of economic value. Such grants may arise out of both love for the elderly person and

fear over what society might think. As in the case with an exchange, a grant is not contractually agreed, nor does it require immediate (or even delayed) reciprocity.

Becker (1981), in his delineation of the economic approach to family functions, further theorized about the altruistic nature of families. However, he cautioned the theory's application aligns more closely with transfers by parents to children.

Even if parents and children are equally altruistic, parents would give more because investments in children are more efficient Contributions to children tend to be more productive than contributions to parents because children have longer remaining lifetimes and have not accumulated as much human capital as their parents, who are older (p. 197).

Researchers have quantified the substantial economic contribution of intrafamily (within household) transfers (Morgan, David, Cohen, & Brazer, 1962; Morgan, J. N., 1978; Baerwaldt & Morgan, 1973). These dollar estimates included such transfers as housework, child care, and imputed rent. However, no specific attention was paid to aged families.

The focus of Moon's work (1977) was to quantify the economic well-being of the elderly. Her comprehensive measure included transfers among family subgroups living in extended units. She theorized that for families with resources greater than subsistence, "subsidies to the 'needy' (elderly) subfamily rise as the level of total extended family economic welfare rises, but less than proportionally" (p. 57). In a later work (1983), Moon expanded the definition of intrafamily transfers to include resource sharing both within and across households.

Transfers to elderly persons, especially from adult children, may be in the form of goods and services, especially housing, and/or money. Researchers concurred such transfers are poorly reported by elderly respondents (Moon, 1977), may be most prevalent in emergency situations (Morgan, J. N., 1983), and are an important means of support for a significant number of elderly persons (Schulz, 1985).

Transfers of goods and services Cicirelli (1981) concluded adult children were essential service providers to elderly parents, especially in crisis situations. Most common services received were shopping, housework, transportation, cooking, and advisory help about financial matters. Ruffin (1984, p. 2) reported the family was more likely than service agencies to provide help, except for nursing care.

Although most elderly maintain their own residences, those few that share living arrangements with adult children experience improved economic status. Economic need on the part of elderly persons was the main incentive for moving in with relatives (Baerwaldt and Morgan, 1973). Elderly women, especially widows and those over age 75, were more likely in 1982 to live in shared housing (Ruffin, 1984, p. 4). When compared to elderly persons living in nursing homes or public housing, more live in extended family situations, especially if age 75 or younger (Ruffin, 1984, Table 2).

Transfers of money Compared to goods and services, financial contributions to elderly relatives were less common (Smith & Olson, 1984; Moon, 1983; Shanas, 1982). More elderly households received occasional help from their children rather than regular help (Ruffin, 1984, p. 2).

As with other income data, researchers suspect significant receipt of financial transfers flowing to the elderly goes unreported.

On average, the elderly expected the government to be the first source of help in times of financial need (Powers, Keith, & Goudy, 1981). However, when controlling for occupational type, professionals ranked family before government.

Trends affecting transfers Loss of a spouse, poor health, and advancing age, all causally related to economic need, were major factors in increasing the likelihood of family transfers to older members. Cicirelli (1981) concluded demographic, social, and economic trends may limit how much adult children are willing and able to help elderly parents.

Among these trends are an increasing number of elderly persons to be cared for by a fewer number of children. The increasing proportion of women in the labor force and the large number of families headed by a single parent limit the family's time and money resources to help elderly relatives (Shanas, 1982). Cicirelli (1981) also noted a change in values toward increased freedom and independence. Adult children may be unwilling to sacrifice their own needs to help an elderly parent, and elderly parents prefer not to request such assistance (p. 10).

Elderly Women and Economic Well-Being

Though the literature reviewed thus far indicated "the elderly" to be far more economically advantaged than in previous decades and less reliant on transfers from family members, academicians warned there is no such

thing as the collective aged (Quinn, 1983; Schulz, 1985). Elderly women still rank among the most disadvantaged in America. In Ross' (1984) inspection of the 1967, 1974, and 1981 Current Population Survey data, he concluded elderly women were repeatedly less well off than elderly men, especially if they were black and more aged.

Profile of Elderly Women

The increase in the elderly population is well-documented; however, less attention has been given to the female group. Due to demographic, economic, and social trends, the elderly's problems are mostly women's problems.

Women live longer than men (U.S. Bureau of the Census, 1983b) and currently outnumber them three to two. The sex ratio of the 65 and over population showed 100 women for every 69 men in 1975; by the year 2000, the ratio is expected to be 100 women for every 65 men (Schulz, 1985, p. 6).

The life expectancy differential, combined with the greater tendency for older men to remarry and choose younger women, results in huge sex differences in marital status and living arrangements among persons 65 and over. Older men are usually married and relatively few live alone. In contrast, almost two-thirds of older women are widowed, divorced, or single, and almost half of them live alone or with nonrelatives (Schulz, 1985, p. 8).

Poverty, oftentimes experienced for the first time, is disproportionately high among women facing these circumstances. In

general, women are twice as likely as elderly men to be poor (Peck & Webster, 1985, p. 10). In 1981, one out of seven elderly persons lived in poverty (U.S. Bureau of Census, 1983a). Poverty rates were highest among women and minorities, the more aged, those who lived alone and in rural areas, and those who depended on Social Security as their sole source of income.

Women's traditional dependence on men also has an impact on her grim economic picture. Corbett, Fethke, and Hauserman said widows' problems were aggravated by a lack of accurate financial information about their deceased spouses' financial records, and a lack of skills, experience and confidence in assuming financial management of these affairs (1980, p. 17).

For women in the labor force, intermittent employment records and low earnings negatively affect their Social Security and private pension benefits in retirement. Women counting on receipt of such benefits as a spouse of a retired worker fall prey to inequities in the system.

Women as Employees

In 1950, men's income was the sole source in nearly three-fourths of American households (U.S. Bureau of the Census, 1983a). Now that scenario of lifelong husband/breadwinner and wife/homemaker applies to far fewer than one-fourth of households.

It is common knowledge that slightly more than half of women age 16 and older are in the labor force, up from 20 percent at the turn of the century and about 45 percent a decade ago. As Chiswick and O'Neill

reported, single, divorced, separated, and widowed women have always been more likely to be employed (1977, p. 143). Labor force entry of married women, and most recently married women with young children, accounted for the upward trend (p. 139).

It has been noted that these labor force participation figures were understated, since they include elderly women. Of working-aged women, about 63 percent are in the labor force. The impact of excluding retirement age people from the labor force statistics is greater for women than men, because women live longer and a higher proportion are 65 and older ("Caution," April, 1984, p. 11). Labor force participation by elderly women has remained relatively stable since World War II. Eight percent of women 65 and older were employed in 1981, down slightly from 10 percent in 1950 (U.S. Bureau of Census, 1983a).

Characteristics of women workers which have negatively affected their retirement benefits are interruptions in employment (U.S. Bureau of the Census, 1984) and the common choice of low-paying clerical, sales, or service occupations (Chiswick & O'Neill, 1977, p. 144; Peck & Webster, 1985, p. 11). These phenomenon were especially pertinent for women currently entering retirement age.

Keating and Jeffrey studied the work careers of 80 retired women in the cohort born between 1910 and 1920. When compared to single women, those who were married had one or more interruptions in work careers and a shorter attachment to the labor force (1983, p. 419). Regardless of marital status, most women in the study had inflexible work histories in which they had "several jobs with little career progression" (p. 421).

For women of this cohort, the researchers summarized the attitude toward work outside the home:

. . . attitudes toward work began to change significantly when they were in the later years of their family and work careers. Their decision about work had been made when society approved of work for single women but not, generally, for married women. In times of crisis such as war or economic depression a married woman was expected to make a sacrifice by entering the work force, realizing that she would return to her primary family responsibilities after the crisis (p. 417).

Another study of labor force participation of women currently entering retirement was conducted by Henretta and O'Rand. Using data from the 1969, 1971, and 1973 waves of the Longitudinal Retirement History Study, they examined determinants of stopping or continuing work for elderly women. They concluded responsibilities for support of a child or an aged parent predicted continued presence in the labor force; the expectation of a private pension had a strong negative effect on continued employment (1980, p. 15).

The changing role of women prompted public attention to Social Security and private pension benefit reform. As Peck and Webster summarized:

Pension reform has become a woman's issue because women comprise a large part of the elderly population and current private pension laws do not take into account the cause of economic deprivation experienced by older women (1985, p. 11).

The quote has equal applicability for Social Security benefits.

Social Security and Pension Benefits

The Social Security system has been under fire of late for its treatment of women. The complaints primarily stem from the fact that

amendments to the Social Security Act in 1939 built into the system the traditional ideal of full-time breadwinning for husbands and full-time homemaking for wives. This assumption no longer is realistic because of increased labor force participation by women, changing perceptions of roles within families, and the rapid rise of women who are widowed, divorced, or separated (Schulz, 1985, p. 108).

Among the foremost issues related to women and Social Security are:

1) Fairness of coverage for one-earner versus two-earner couples. If both partners work outside the home, the couple may get less in total retirement benefits from Social Security than a couple in which only one spouse works -- even if the total earnings and Social Security taxes paid by the two couples are equal (Gordon, 1979, p. 227; Schulz, 1985, p. 126). The effect is the same for survivor's benefits.

2) Differential treatment of working and nonworking women. Fox used the Social Security Administration's Longitudinal Retirement History Study to research Social Security earnings of retired couples. He concluded that "though about half the wives claiming benefits in 1968-74 were retired workers, their benefits were not necessarily much larger than what they would have received as dependent spouses" (1979, p. 17).

3) Inadequate coverage for homemakers. Lifelong homemakers have no Social Security credit in their own right. A divorce, disablement, or death of a spouse (especially in the early years) could result in the homemaker receiving meager benefits or no benefits at all (Schulz, 1985, p. 110).

Since the Social Security Act was signed into law in 1935, its purpose has been to replace part of wages lost when a worker retires. It was expected other sources of income, including private pensions, would help to maintain an acceptable level of living in retirement.

Henretta and O'Rand (1980, p. 15) concluded that although the effect of pension coverage is great, relatively few women in the cohort currently retiring expect to receive a private pension. Miller reported that only 13 percent of women workers retiring today collect private pension benefits (1981, p. 1). Both authors agreed private pension coverage will be increasingly central to retirement decisions in the future.

The Retirement Equity Act of 1974 took steps toward improving private pension benefits for both women workers and wives of men workers. Among other provisions, it allows for pension benefits to women whose husbands die before reaching early retirement age; requires wives' written approval if their husbands decide not to provide them with widows' pension benefits; and protects women workers against loss of accrued pension rights during leaves for childbirth and child-rearing (Peck & Webster, 1985, p. 13).

These changes are welcomed by working-aged women, but retirement-aged women suffer from private pension standards applicable under the Employer Retirement Income Security Act (ERISA) of 1984. For example, the husband could waive the joint and survivor option, probably due to its higher cost, and leave a widow without pension payments (Schulz, 1980, p. 135). In addition, ERISA did not mandate a "specific survivors benefit in

qualified pension plans if the worker died before reaching early retirement age" (Corbett et al., 1980, p. 19).

Vesting requirements of 10-15 years penalized women who moved in and out of the labor force. As a result, "in 1972, only 37 percent of full-time working women were covered, as compared to 52 percent for men" (Schulz, 1980, p. 190). Part-time workers generally received no pension credit for their work.

Another problem for women workers was the fact that employers weren't required under ERISA to include workers in pension plans until age 25. Women's highest rates of labor force participation occur between high school graduation and years when pre-school children are at home. Reporting in 1980, Corbett et al., said, "Women who now leave the work force during their prime childbearing years and then retire, receive smaller pensions because of a reduced number of credit years" (p. 20).

Statement of Research Issues

Empirical research indicated a more comprehensive measure of economic well-being was especially important when assessing the relative status of elderly persons. However, given the fact "the elderly" are not a homogeneous group, aged women were singled out for inspection in depth.

Elderly women were described as among the most disadvantaged groups in the United States. One private mechanism for improving their relative economic well-being -- financial transfers from family members -- was a significant factor for the few receiving such help. Due to inequities in

the Social Security and private pension systems, benefits from these sources also have limitations.

Inspection of elderly women's current economic condition and trends affecting the economic condition of future cohorts resulted in two research questions addressing private mechanisms for affecting economic status in retirement. The topics of a woman's own contribution to her financial resources in later years and financial transfers from family members are considered in the next two sections.

SECTION I. THE EFFECT OF LABOR FORCE ATTACHMENT
ON ELDERLY WOMEN'S CONTRIBUTION
TO THEIR ECONOMIC WELL-BEING

Introduction

The word "grim" best describes elderly women's economic well-being. Almost two-thirds of older women are widowed, divorced, or single, and almost half of them live alone or with nonrelatives (Schulz, 1985, p. 8). In 1981, nearly 64 percent had incomes below \$6,000 (U.S. Bureau of the Census, 1983b, p. 469).

After decades of legislative changes improving the economic status of the elderly, remaining problems have primarily become women's issues. Inadequacies in Social Security and private pension survivor benefits are generally blamed. As society becomes more accepting of women's labor force participation, what responsibility do women themselves have for providing financial security in retirement?

The purpose of this paper is to examine the effect of a woman's labor force attachment on her contribution to economic well-being¹ in retirement. The analysis is of a national sample of about 1,000 elderly women with marital histories. Regression techniques allow for examination

¹While a more comprehensive measure of economic well-being than money income will be used in this analysis, the purpose is not to quantify the relative level of economic well-being of elderly women, nor to assess the impact of various income sources to economic well-being. For an overview of these issues, see Schulz (1985) and Moon (1977).

of the explanatory variable while controlling for other factors, such as occupation and selected demographic characteristics.

Background of the Study

Elderly women are twice as likely as elderly men to be poor. Part of the blame is largely uncontrollable: Women live longer. At age 65, the life expectancy of women is four years longer than men (U.S. Bureau of the Census, 1983b, p. 74). This fact, coupled with the widely discussed "greying of America" phenomenon, leaves the elderly ranks primarily female and widowed.

Women's dependency on men, even in cases where she has earned an income, is to blame. Corbett et al., write:

The widows' problems often include (1) lack of accurate financial information about her deceased spouses' assets, records, and insurance, and (2) a lack of skills, experience and confidence in assuming financial management of these affairs (1980, p. 17).

Inflation is to blame (White House Conference on Aging, 1982). This is especially the case if rising prices are concentrated among items such as food and health care, which comprise a larger part of elderly persons' budgets than the general public's. Indexing of Social Security benefits, the primary income source for elderly women, provides a significant cushion against price increases. Recent scholarly writings indicate inflation may not be any greater of a problem for old people than for other cohorts (Clark & Sumner, 1985). Nonetheless, the problem still exists.

Possibly the greatest blame for elderly women's economic plight has been traced to inadequate private and public mechanisms for providing sufficient support to survivors. Particularly under fire are Social Security benefits and private pensions.

It is generally agreed that Social Security in the United States, built on the husband/breadwinner and wife/homemaker ideal of the 1930s, no longer is appropriate for contemporary family patterns. Three issues, as summarized by Schulz (1985), are of paramount importance to women:

- 1) Equity and adequacy of spouse and survivor benefits (pp. 97, 126).
- 2) Fairness of coverage of one-earner versus two-earner couples (p. 126).
- 3) Coverage of homemakers and divorced persons (p. 110).

Due to dramatic increases by married women in the paid labor force, and the rapid rise of divorce, separation, and widowhood, Social Security benefits for women often are unfair and inadequate.

The same can be said for private pensions (U.S. Congress, House Select Committee on Aging, 1982; Peck & Webster, 1985). The Retirement Equity Act of 1984 takes steps toward improving benefits both for women workers and the wives of men workers. Among other provisions, it allows for pension benefits to women whose husbands die before reaching early retirement age; requires wives' written approval if their husbands decide not to provide them with widows' pension benefits; and protects women workers against loss of accrued pension rights during leaves for

childbirth and child-rearing. Pension experts agree further changes are necessary before women achieve true pension parity with men.

The nature of women's labor force participation effects receipt of both Social Security and private pension benefits. Intermittent work records, part-time employment, and low earnings profiles (U.S. Bureau of Census, 1984), all typical descriptors for female employment, tend to keep benefit levels low. The work-family interface often dictates these decisions (Keating & Jeffrey, 1983; Henretta & O'Rand, 1980; U.S. Bureau of the Census, 1984). Nonetheless, women workers have and will continue in greater numbers to earn Social Security and pension benefits in their own names and contribute to the family's asset accumulations.

Theoretical Model

Current money income, often used by economists as a proxy for measurement of economic welfare, has less applicability for elderly women than for other cohorts. Only about 10 percent of elderly women (U.S. Bureau of the Census, 1983a) had earnings from employment in 1981. Social Security is the single largest source of income. Moon (1977) theorizes that other components for assessing economic welfare of elderly persons have importance.

In addition to current money income, her comprehensive model includes an annual share of net worth, net contributions of government, intrafamily transfers, and the value of leisure and nonmarket productive activities. (Intangible commodities such as proximity of residence to adult children

were recognized but not included in the model due to difficulties in measurement.)

After empirically testing the model, Moon concluded it has a more equal distribution, a higher median value, and in general was to the right of the distribution of current income. She reported, "Families headed by women show relatively large gains when their economic status is based on the expanded measure" (1977, p. 111).

The Sample

The data were obtained from the Retirement History Longitudinal Survey conducted by the Social Security Administration. The purpose of the survey was to collect information about participants' work lives, health, living arrangements, financial resources and assets, expenditures, and retirement plans. A national sample of 11,153 persons comprised of men, regardless of marital status, and women of the same ages who were not married when selected, was first interviewed in 1969. All respondents were in the cohort born in 1905-1911, or age 58-63 when first interviewed. They were re-interviewed biennially through 1979.

Due to this study's focus on elderly women, the sample was narrowed to women only. Further, given the interest in studying women older than 65 years, data from respondents in the 1979 wave were used. At that time, the women in the survey group were between 68-73 years of age. The few cases with children under 18 in the household were excluded. This

resulted in a sample size of 1,878 elderly women age 68-73 who were nonmarried when selected in 1969.

As a result of missing data on the income and asset questions that could not be appropriately estimated, the sample was further reduced to about two-thirds of the original sample. To assure that this large deletion of cases was not biasing the sample used for analysis, those cases with complete income and asset information were compared with those with incomplete reporting. Comparison of percentages of the two groups as they fell into income categories² indicated no significant differences from one sample to another. It was concluded sample bias was not introduced due to missing cases.

Finally, given the interest in a woman's own contribution to economic well-being, the 275 never married respondents were omitted from the sample. Obviously, a single woman would generally bear full responsibility for financial support during her lifetime. The resulting sample size was 1,003.

Limitations of the Data

A major limitation of the data is its nonrepresentativeness of women at a given age. Ireland and Schwab (1981, p. 385) explain: "In the

²Given by an aggregate income measure. See Goudy (1982) for an assessment of the accuracy of this measure. He concluded (p. 81), "Responses from questions using categories (in this data set) tend to reveal the same income distribution as a summary of items asking for exact figures."

pretest stage of the study, it was discovered that married women tended to define retirement in terms of their husbands' rather than their own retirements. For this reason, married women were not sampled separately, but as spouses to men in the sample." Only nonmarried women were sampled separately.

Consequently, in looking at the sample of nonmarried women, the widowed respondent was disproportionately represented. Since assets were likely to be transferred to the widow upon the death of a spouse, the own contribution ratio for widows was overestimated for some. For others, left without assets or other means of support, a higher ratio was reasonable.

Ireland and Schwab pointed out two other limitations of the data. First, readers are reminded that the data only report information of one cohort of Americans (p. 385). Since the respondents experienced the Great Depression in young adulthood, they may have different attitudes toward saving for retirement and the right time to retire, for example, when compared to other, especially younger, cohorts.

Secondly, the researchers cautioned against the nonrepresentativeness of a longitudinal study as it runs its course. An accumulated nonresponse may hinder the study's ability to represent persons originally sampled.

However, Goudy (1982) examined the effect of attrition on data in the Retirement History Survey by using nonresponse information in the 1971, 1973, 1975 and 1977 waves. After investigating frequency distributions and bivariate and multivariate analyses, he concluded (p. 16) that the

loss of potential respondents through causes other than death "has not destroyed the representativeness of the sample." Further, he expected this conclusion to be equally true for the 1979 data.

Sample Description

More than three-fourths (77.4 percent) of the elderly women in the sample were widowed, as would be expected given the nature of the sample selection. Nearly 15 percent were divorced. The remainder were divided evenly between married and separated women.

Slightly more than four-fifths (83.3 percent) of the women were white. The remaining nonwhites were primarily black.

The educational level for the sample was low, as would be expected for women of this cohort. Nearly half (49.8 percent) had an eighth grade education or less. Slightly more than 40 percent had attended or completed high school. Of the remaining 10 percent who attended college, only about 2 percent reported completing four years or more.

Two-fifths of the sample reported no occupational type. This category would primarily include full-time homemakers, but also those who had such minimal labor force attachment that naming an occupation did not seem appropriate. Of those who named occupations (based on employment in 1969), most were blue collar workers (56 percent). Far fewer (25 percent) were in clerical or sales jobs. The remainder were in professional or managerial positions.

Definitions of the Variables

The model for this study posits that a woman's own contribution ratio is a function of labor force attachment, type of occupation, and the demographic characteristics of marital status, race, and education. (See Table 1 for descriptive statistics.) The following discussion outlines how each variable was operationalized. Attention also was given to limitations of the variables and to hypothesized relationships between the dependent and individual independent variables.

Woman's own contribution ratio

Due to the nature of the data, it was impossible to precisely delineate a woman's own direct contribution to economic well-being. Thus, a continuous dependent variable, the contribution ratio, was constructed as the ratio of income and assets reported for the respondent (i.e., the woman) to the income and assets reported for the respondent and spouse collectively.

The ratio, ranging from 0 to 1, served as an indicator of a woman's contribution to her economic well-being only and its limitations are outlined below. (Note the mean value for the ratio. Since the sample was heavily weighted with widowed women, this high mean may reflect an upward bias resulting from inheritances now in a woman's own name but directly earned by a husband. In other cases, it emphasizes a financial need for late life labor force attachment.)

Using Moon's theoretical model of a comprehensive objective measure of economic well-being (1977), the following financial information reported for 1978 was aggregated and used in the construction of the contribution ratio.

Earned and unearned income Earnings from both paid employment and self-employment are considered, along with return on assets such as interest, dividends, and rent.

Pension income If a single, non-Social Security pension was received as a result of employment, the amount appeared in the numerator. Survivor benefits were assigned to the denominator. In the rare case of multiple pensions, the data did not allow differentiation between pension benefits received as a retired employee or as a spouse. Consequently, additional pension income was assigned to the denominator having the effect of underestimating the ratio.

Social Security income For those respondents currently married, divorced, or separated, the Social Security old age benefit was assigned to the denominator only. Since it was not possible to determine if such benefits were earned as an employee or as a dependent, the latter case as described by Fox (1979) was assumed to be most common. Where an old age benefit was paid as a result of own earnings, the woman's contribution ratio would be understated.

Even if the Social Security benefit was received as a result of own earnings, some would argue assignment of the amount to the numerator would not be accurate. It might be more appropriate to assign only the margin

Table 1. Descriptive statistics on woman's own contribution ratio and independent variables

Variable Name	n ^a	Mean	Median	Standard Deviation
woman's own contribution ratio (0-1 range)	1003	.746	.875	.306
labor force attachment indicator (in years)	981	13.675	11.000	12.196
type of occupation:	1000	--	--	--
no occupation ^b (n = 404)				
professional/managerial (n = 107)				
clerical/sales (n = 150)				
blue collar (n = 334)				
current marital status:	1003	--	--	--
widowed ^b (n = 776)				
married (n = 42)				
divorced (n = 145)				
separated (N = 40)				
education (in years)	994	9.533	10.000	3.373
race:	1003	--	--	--
nonwhite ^b (n = 167)				
white (n = 836)				

^aSample size varies due to missing data.

^bReference category.

of difference between the earned benefit and the lesser dependent benefit to the numerator.

For widows, the Social Security question is clearer. Any widowed Social Security beneficiary over age 65 received either an old age or survivor's benefit, whichever was greater. If she was receiving an old age benefit, she earned it from labor force participation (amount appears in numerator). If she was receiving a survivor's benefit, the amount was assigned to the denominator.

Other income Included here was state cash sick benefits, worker's and unemployment compensation, private insurance annuities, and non-Social Security disability pensions.

Net government transfers If the respondent received Supplemental Security Income and/or other public welfare, this amount was reduced by 50 percent of real estate taxes paid (numerator only). The 50 percent reduction assumed an equal, joint ownership of real estate property with a present or former spouse. In the cases where no welfare income was received, but real estate taxes were paid, a value of zero was assigned. No other information about tax payment was available.

Family transfers and windfall income Money transfers from family members both outside the household and inside the household were considered. Only 50 percent of this amount was included in the numerator. Again, it was arbitrarily assumed that half of such income resulted from the woman's contribution.

Net Worth The amount of net worth, calculated by subtracting debts from assets, was divided by the respondent's life expectancy (see

Table 2). This resulted in a share of net worth for the 1979 reporting period and is not synonymous with an annuitized value of net worth that takes into account a real interest rate. Assets included equity in a house, farm, business and/or other real property, market value of stocks and bonds, money loaned others, amounts in checking and savings accounts, and the face value of life insurance and annuities. Debts, aside from mortgages on real property already considered in equity amounts, were reported by a single question asking "how much it would take to pay off all your debts now."

Labor Force Attachment Indicator

This continuous variable, given in years, combined three reporting periods -- the last job before 1969, the job in 1969, and the job in 1979. The variable primarily indicated late life rather than lifetime labor force participation. This was appropriate given general information about many women in this age cohort who found themselves in the labor force for the first time following divorce or death of a spouse.

The variable has limitations because it did not take into account fluctuations in employment during any one year due to part-time or seasonal employment. Though the present data did not allow such an approach, operationalizing the variable in hours per year would be more useful.

The variable provided an indication of a women's contribution to family income. It was hypothesized that an increase in labor force attachment had a positive effect on the woman's own contribution ratio.

Table 2. U.S. life expectancy of elderly women^a

Age in 1980	<u>Expectation of life in years</u>	
	White	Black
65	18.5	16.5
67.5 ^b	16.7	15
70	14.8	13.4
72.5 ^b	13.5	12.1
75	11.5	10.7

^aSource: Statistical Abstract of the United States 1984, U.S. Department of Commerce (104th Ed.), p. 74.

^bLife expectancy interpolated for this age.

Type of Occupation

Occupational type was included in the model using dummy or indicator variables. Professional/managerial, clerical/sales, and blue collar were coded as (0, 1) dummy variables. The omitted, or reference category, was "no occupation".

The occupational type used for analysis was that reported in 1969 when the respondents were age 58 to 63. This provided more useful information than that reported in 1979, since many respondents had dropped out of the labor force by then. It was hypothesized that each occupational type, as compared to the reference category of no occupation, would have a positive relationship to the dependent variable.

Demographic Variables

Education Education was treated as a continuous variable given in a number of years of school completed. It was expected that as the level of education increased, especially beyond high school, the own contribution ratio would increase.

Current marital status Marital status was represented by indicator variables. Married, divorced, and separated were coded as (0, 1) dummy variables and the omitted or reference category was widowed. It was expected that married women would have a lower own contribution ratio than divorced and separated women.

Race The small number of "other" are grouped with blacks, so the dichotomy was white versus nonwhite. An indicator variable was constructed for whites while nonwhites was the omitted group. It was expected nonwhites would have a higher own contribution ratio than whites.

The Analysis

Though the primary goal was to examine the effect of labor force participation on the respondent's own contribution ratio, it was hypothesized the bivariate approach was inadequate due to the confounding effect of other variables. Therefore, multiple regression analysis³ was used -- first, as a descriptive tool to evaluate the linear relationship

³Residual analysis indicated the regression assumptions of linearity, equality of variance and normality had not been violated to the extent that ordinary least squares regression was not appropriate.

between the primary variables in question while controlling for others; and secondly, for testing hypotheses that population parameters did not equal zero.

The analysis proceeded in three stages. First, the goal was to develop the most parsimonious model for explaining women's own contribution ratios. Since education was not included in the resulting reduced model, a second analysis sought to determine if education entered the model as it interacted with other selected explanatory variables (race, labor force participation indicator, and occupation).

Finally, due to the highly significant nature of the categorical marital status variable in describing own contribution ratio, a third analysis tested for interaction effects between the labor force attachment indicator and marital status. If no interaction effects are present, it may be concluded that the effect of the labor force indicator is the same for all marital groups.

The zero-order correlation matrix for all variables is found in the Appendix. The highest correlation in any relationship is 0.36 and most were below 0.20. Therefore, multicollinearity did not appear to be a problem.

Testing the Full Model

The posited model provided a highly significant overall F-test (see Table 3), indicating one or more of the population regression coefficients had an absolute value greater than zero. The adjusted R-square of 0.35,

Table 3. Regression analysis of woman's own contribution ratio on selected independent variables (n = 1003)

Independent variables	Regressing Coefficient	F-value
labor force participation indicator	.0016	4.62*
marital status:		177.62***
married	-.604	
divorced	-.363	
separated	-.430	
occupation:		1.57
professional/managerial	.019	
clerical/sales	.054	
blue collar	.003	
education	-.001	.26
race	-.046	4.22*
constant	.857	
R-squared adjusted	.3520	
F-value	61.48***	
d.f.	9/993	

*Significant at .05 level.

***Significant at .001 level.

fairly high for most social science research, also gave confidence in the fit of the regression equation.

Since the noncontinuous independent variables in the model were represented by (0, 1) indicator variables, the constant or intercept term represents the estimated intercept for nonwhite widowed women with no

occupation. Supporting the hypothesis of the research, the labor force participation indicator was positively related to the own contribution ratio, although the b-value was small. Inspection of the standardized beta coefficient indicated marital status had the most explanatory power.

Widowed women, the omitted dummy-coded category, had the highest ratio of all marital statuses. This is congruent with information about the adequacy of survivor's benefits and the need for many widows to fend for themselves. Compared to widowed women, the ratio was lower for divorced and separated respondents and was the lowest for married women.

The positive sign on each occupational type was in the hypothesized direction. Obviously, any occupation listed by the respondent, as compared to the reference category of no occupation, suggested a contribution to family financial resources.

Education was not in the expected direction. However, the b-value was so small that the sign could be easily changed by a few additional cases. The negative sign on race indicates nonwhites have a higher ratio than whites. This agrees with general knowledge about the greater likelihood of black women being in the labor force compared to whites.

F-tests were used to determine if each independent variable (or group of variables) contributed significantly to the ratio after controlling for all other variables in the model. The reduced model included the variables of labor force indicator, marital status, and race. It was significant at the .001 level ($F = 109.65$ with 5/997 d.f.) and showed no

appreciable decrease in the adjusted R-square (.3516), compared to the full model.

The resulting regression equation was:

$$\text{RATIO} = 0.842 + 0.0021 \text{ LF} - 0.039 \text{ RACE} - 0.603 \text{ MAR} - 0.361 \text{ DIV} - 0.430 \text{ SEP}$$

$$(0.023) \quad (0.0007) \quad (0.021) \quad (0.039) \quad (0.022) \quad (0.041)$$

where RATIO = woman's own contribution to economic well-being, LF = labor force participation indicator, RACE = race. MAR, DIV, and SEP are indicator variables representing marital status, where MAR = married, DIV = divorced, and SEP = separated. The standard error of the estimates are given in parentheses below the equation.

Use of the indicator variable coding scheme allowed for inspection of the dependent variable for each marital status category. For example, the equation for divorced nonwhite women is obtained by setting RACE = 0, MAR = 0, DIV = 1 and SEP = 0. Thus,

$$\text{RATIO} = 0.481 + 0.002\text{LF}.$$

Education and occupation were omitted from the reduced model. Perhaps without the presence of a spouse, women's contribution to their own economic well-being was necessary, regardless of years of education or occupational type.

Testing for Interaction

Since the adjusted R-squared in the reduced model indicated 65 percent of the variance was unexplained, a further model-building strategy was to test for interaction effects. Of interest were the possible

interactions of education with selected other explanatory variables, and the labor force indicator with marital status.

Education It was suspected that education might significantly enter the model as it interacted with race, the labor force participation indicator and occupational type. An F-test comparing the model containing the five interactive terms of interest with the full model given in Table 3 resulted in a calculated F-value of 0.685 with 5/987 d.f. This non-significant F-value showed the addition of these interaction terms did not improve the explanatory power of the model.

Labor force participation indicator and marital status Another analysis tested for the possible multiplicative effect between the labor force participation indicator and marital status, after controlling for the main effects of these variables and race. It was hypothesized that the relationship between the labor force participation indicator and the ratio varied across marital statuses. For example, married women of this age cohort may have fewer years in the labor force compared to widowed or divorced women. This multiplicative effect could better explain a respondent's own contribution ratio.

It was found the addition of these multiplicative terms into the equation for the reduced model was not significant in explaining the own contribution ratio $F = 1.322$ with 3/994 d.f.

Discussion

This study indicates that labor force participation of a woman, though it varies substantially depending on marital status, has a significant impact on her contribution to total financial resources in retirement. Widowed women showed the highest contribution to their own economic well-being in retirement. An upward bias may be present here due to inheritances and benefits now in her name as a result of her husband's work history. However, the high contribution ratio of widowed women also underscores a forced need to enter the labor force for some. The same is true for divorced women, who also exhibited a higher own contribution ratio compared to separated and married women. (Due to the sample selection, caution must be taken in interpreting results for married women. Recall they were nonmarried in 1979, and had either remarried or married for the first time between 1969 and 1979.)

The study has primary implications for women as creators of their own financial destiny during the last life cycle stage. Complacency about finances is, out of necessity, a thing of the past. If dependent on a husband for financial support, she must become fully aware of her economic status if she were to become widowed or divorced.

Those women who choose to participate in the labor force will want to be aware of the effect of intermittent work histories and job choice on retirement benefits. The best safeguard against poverty in retirement may well be an investment in her own human capital (Mincer & Polachek, 1974) -- viewing work outside the home as necessary and developing careers

rather than just taking jobs to make ends meet. Educators, even as early as high school, can help women understand the economic as well as emotional aspects of career choices, financial planning through the life cycle, and decisions about child rearing. What steps can women take (in addition to or instead of paid employment) to attain an acceptable quality of life during the final life cycle stage? If labor force participation by women is necessary to provide for retirement, what will be the expected ramifications for nonmarket household work, especially caring for the nation's children?

Finally, the economic status of older women must continue to be a concern for public policy makers. What effect do changes in Social Security and private pension regulations have on the economic well-being of elderly women? Should incentives for women to take more responsibility for retirement security be built into the income tax and Social Security systems?

Due to the limitations of this data set, replication of this study is a research priority. Further, the nonhomogeneity of elderly women (Schulz, 1985; Quinn, 1983) suggests empirical examination of subgroups (i.e., retired versus nonretired, dual pensioners versus those receiving only Social Security, different age cohorts and income categories, constant versus intermittent and full- versus part-time workers.)

Theorists and methodologists could address the issue of how to refine the dependent variable, a ratio representing a woman's own contribution to her total financial resources in retirement. Effective handling of the

recognized reporting problem of income and asset information, especially among elderly respondents, (Radner, 1982, p. 20) also is a point for further investigation.

SECTION II. ELDERLY WOMEN AS RECIPIENTS OF FINANCIAL TRANSFERS FROM FAMILY MEMBERS

Introduction

Historically, care of the nation's elderly was a family responsibility. Since the 1930s, the explosive growth of government transfers has substantially replaced the direct giving of cash, food, and housing by one family to another (Kreps, 1965; Bivens, 1976; Lampman & Smeeding, 1983). The elderly have voted repeatedly for the "independence" of government programs over dependence on their children.

This family-to-societal shift of responsibility was spawned by many factors, including increased family mobility, changing housing patterns, economic pressure from inflation, and more labor force participation by women (Cicirelli, 1981). Today, the newly retired can expect Social Security benefits to be their single largest source of income (Upp, 1983; U.S. Bureau of the Census, 1983a).

Medicare, Medicaid, Supplemental Security Income, property tax relief in all states, and the rapid growth of private pension programs also have contributed to the improved economic status of persons age 65 and over. Danziger et al. (1984a, p. 179) estimated the elderly are on average at least 90 percent as well off as the nonelderly. However, when considering the heterogeneous nature of the elderly population (Quinn, 1983; Schulz, 1985), women, the old-old (75 years and over) and blacks still are among disadvantaged groups.

Policy makers and taxpayers alike are questioning if too much money is being spent on the elderly. Are recent cuts in Social Security benefits a prelude to more defederalization? Will families again face major responsibility for elderly members' financial support? This is not likely to the extent previously experienced, given the elderly's strong expectation for monetary help from the government and the increased demands faced by adult children to economically maintain the nuclear family unit.

Nonetheless, researchers have recently documented the substantial impact of familial transfers of goods, services, and money to the improved economic well-being of the elderly (Baerwaldt & Morgan, 1973; Morgan, 1978; Moon, 1977, 1983)¹. Boulding (1973) provided a theoretical framework for such study via delineation of the grants economy. Unlike the two-way nature of an exchange, a grant is the transfer of economic goods from a donor to a recipient without immediate or contractual reciprocity.

Becker, in his economic approach to the family, also provides theoretical basis for studying altruism in family systems (1981). However, his theory provides more basis for parental transfers to children

¹Readers are cautioned to note the differences in defining family-oriented transfers. For example, Moon (1983, p. 45) defines intrafamily transfers as resource sharing both across (when family members do not live together) and within households. Contrastingly, Baerwaldt and Morgan (1973, p. 205-206) equate intrafamily with intra-household transfers only. Transfers to family members living in another household are termed "interfamily".

than vice versa. "Contributions to children tend to be more productive than contributions to parents because children have longer remaining lifetimes and have not accumulated as much human capital as their parents, who are older," he concluded.

Much documentation exists regarding the essential role of adult children as providers of services and in-kind transfers (housing being the most substantial) to elderly parents, especially during times of illness and crises. The reader is directed to Ruffin (1984, p. 3-6) for an overview of this empirical evidence.

Far less is known about financial transfers flowing directly from younger to elder members of a family, except that they are minimal compared to the dollar value placed on transfers of goods and services. Shanas (1982) estimated only 3 to 4 percent of adult children make regular contributions to elderly parents. In comparison, the incidence of occasional financial help is reported to be more common (Morgan, 1983).

When considering elderly parents as both givers and receivers, Moon (1983) reported that only slightly more elderly households (6.6 percent compared to 5.4 percent) are on the receiving end. Of a sample of 75 elderly and 75 beginning households, Smith and Olson (1984, p. 4) found money grants flowing to the young to be far more prevalent than those to support the elderly. As with other income data, researchers suspect significant receipt of financial transfers flowing to the elderly goes unreported or underreported.

Consistent with studies about the limited nature of financial transfers to elderly family members, Powers et al. (1981, p. 210) found rural aged men expected the government to take primary responsibility for their money problems. However, when differentiating by occupational groups, professionals (both salaried and self-employed) ranked the family as having most responsibility in case of financial need.

Spurred by public policy questions, the debate about how to best quantify economic well-being for the elderly continues. Might consideration of financial transfers from family members significantly improve the relative economic position of some elderly persons?

The purpose of this paper was to study elderly women as recipients of family financial transfers. Elderly women were of interest to the researchers due to their high proportion in an increasing elderly population, and the financial hardships they often face as a result of divorce and widowhood (Peck & Webster, 1985).

Procedure

The data were obtained from the Retirement History Longitudinal Survey conducted by the Social Security Administration. A national sample of 11,153 persons comprised of men, regardless of marital status, and women of the same ages who were not married when selected, was first interviewed in 1969. All respondents were in the cohort born in 1905-1911, or age 58-63 when first interviewed. They were re-interviewed biennially through 1979.

Due to the present study's focus on elderly women, the sample was narrowed to women only. Further, given the interest in studying women older than 65 years, data from respondents in the 1979 wave were used. This resulted in a sample size of 1,878 elderly women age 68-73 who were nonmarried when selected in 1969.

The data are limited due to their nonrepresentativeness of women, the reporting of only one cohort of Americans, and the accumulated effect of nonresponses as the longitudinal study runs its course (Ireland, Motley, Schwab, Sherman, & Murray, 1976; Ireland & Schwab, 1981).

The sample was dichotomized to differentiate those elderly women reporting receipt of financial transfers from those who reported none. When asked if financial support was received on a regular or occasional basis from children or siblings, 241 respondents said "yes." When asked to report a specific dollar amount, only 68 of the 1,878 women responded. This is consistent with previous studies that show cash receipts to be uncommon and poorly reported.

Statistical analyses were guided by three objectives:

- 1) To identify variables influencing the probability of obtaining financial support. For this logistic regression, the dichotomous dependent variable was indication of receipt versus nonreceipt of financial transfers on a regular or occasional basis from parents or siblings.
- 2) To compare the subsample of women who reported receiving financial transfers with those who had not. A nondirectional t-test to compare

significant differences in means was employed with two-way cross-tabulations providing further elaboration.

3) To develop a predictive model profiling women who receive financial transfers from family members. Multiple regression techniques were used to find the best linear prediction equation, evaluate its prediction accuracy, and use the sample data to estimate confidence intervals for the regression coefficients in the population. Transfers, both from family members within and outside the elderly women's households, were given in dollar amounts and served as the continuous, dependent variable.

Independent variables described the respondent's financial status, her receipt of public welfare, her health, and selected demographic characteristics. Major financial variables were operationalized as follows:

1) current money income, an ordinal variable denoted by the midpoint of dollar ranges².

2) change in money income, an ordinal variable comparing the current money income question in 1979 with the same question in 1977. A negative amount indicated the respondent faced a declining financial situation in absolute dollars.

²See Goudy (1982) for an assessment of the accuracy of this measure. He concluded (p. 81), "Responses from questions using categories (in this data set) tend to reveal the same income distribution as a summary of items asking for exact figures."

3) net worth, a continuous variable taking into account the dollar value of all assets held by the respondent (and spouse, if present), less mortgages and other debts. Included was equity in a house, farm, business and/or other real property, market value of stocks and bonds, money loaned others, amounts in checking and savings accounts, and the face value of life insurance and annuities.

4) windfall income, a continuous variable indicating any amount of \$50 or more received as a lump sum from such sources as an inheritance, tax refund, sale of personal property, or life insurance.

Other indicators of financial status were home ownership, the primary asset of many elderly persons, and current employment. Each variable was a dichotomy with "no house" and "no job" serving as the respective reference categories in the regression equation.

Receipt of public welfare was indicated by two variables. Public transfers of cash, primarily Supplemental Security Income, were entered as a continuous variable in dollars. In-kind goods and services (food, medical care, and housing) were indicated by a yes-no dichotomy. No receipt of in-kind public welfare was the reference category.

Health status also was described in two ways -- as the recipient compared herself to others and as she compared her health to the past. The trichotomy in each case was "same" (the reference category), "better", or "worse".

Continuous demographic variables of interest were education, given in number of years of schooling, and persons in the household. For race, the

small number of "other" were grouped with blacks, so the dichotomy was white versus nonwhite. Nonwhites was the reference group. For current marital status, "never married" was the reference group. The three remaining dummy-coded categories were married, widowed, and divorced/separated.

Results

By assigning a value of zero to the 1,556 respondents who reported no receipt of financial transfers and unity to the 241 respondents who said they had received regular or occasional help from family members, logistic regression procedures were used to investigate the probability of receipt of financial transfers. Included within the subsample of 241 respondents were the 68 who reported in 1979 an actual dollar amount received.

Explanatory variables were the same as those indicated above, except net worth was left out of the regression equation due to missing values for the nonrecipients that could not be appropriately estimated. Further, since none of the 204 married women reported receipt of financial transfers, they were deleted from the sample.

Logistic regression techniques indicated poor fit of the model to the data. This may be due in part to the disproportionate number of nonrecipients in the sample. However, the analysis did isolate variables of significant influence for predicting the likelihood of receiving financial transfers.

Current income was highly significant in explaining the dependent variable. As income increased, the probability of receiving financial transfers went down.

The change in income variable was significant and supported the finding on the income variable. As absolute incomes increased in 1979 compared to 1977, the likelihood of receiving financial support decreased.

The data also indicated that an increase in public assistance and number of persons in the household was associated with a decrease in receipt of financial transfers. The latter finding may reflect the increased probability of helping patterns among families sharing housing.

Finally, the logistic regression indicated race and marital status to be significant in explaining the likelihood of receiving financial support. White, widowed, and divorced women were more likely to receive money help than nonwhites and never married women.

Profile of Those Reporting Dollar Amount Received

Of the subsample of 68 recipients reporting a dollar amount of financial transfers, 25 percent received substantial amounts, ranging from \$1,000 to \$4,200. Half of the sample received only \$300 or less. The remaining 25 percent received \$370 to \$960. Respondents were primarily white (87 percent) and more highly educated than average for this cohort. About 60 percent had attended or completed high school; 6 percent had attended college.

As would be expected given the sample selection, 75 percent of the respondents were widowed. Twelve percent were never married and 13 percent were divorced or separated. Most of the women lived alone (63 percent). Since none of the women had remarried since the time of the sample selection, the remainder evidently lived in extended family situations or with unrelated persons.

Most respondents did not report receiving either cash or in-kind public welfare. In both cases, about nine-tenths of the sample had no receipt of such assistance.

For both health variables, about two-fifths of the women reported their status to be the same compared to others or compared to the past. When compared to others, more felt they were better (37 percent); only 4 percent were worse. When comparing their health status to the past, the opposite was true. More described themselves as worse (40 percent) than better (18 percent). This suggests elderly women realize their health is failing but accept it as a factor of aging.

One-third of the women reported current money income ranging from \$5,500 to \$16,250. The remaining sample had incomes of \$4,500 or less. Most were not currently employed (80 percent), as would be expected for this age group.

More than half (56 percent) of the women reported an increase in financial status in 1979 compared to their situation in 1977. The range of increase was \$500 to \$6,750 (in absolute, not constant dollars). About one-third indicated their financial situation had not changed. Only 13

percent reported a decrease in income with a dollar range of negative \$500 to negative \$4,750.

Almost half of the sample had a net worth exceeding \$10,000 and ranging up to \$205,000. A tenth of the women had a negative or zero net worth. A major component of net worth for many elderly persons is ownership of a home. The sample was almost evenly split on the home ownership question.

Comparing Recipients, Non-recipients

With that profile of the financial transfer recipient in mind, the researcher questioned how it differed from nonrecipient's. (Refer to Tables 1 and 2. Note recipients refer to those 68 respondents who reported an actual dollar amount received. Those respondents who said they had gotten help in the past from family members, but did not report an actual dollar amount, were included in the nonrecipient category.)

A two-tailed t-test to detect significant differences in means showed the recipients to have slightly lower incomes compared to the nonrecipients. However, the change in income variable indicated the average recipient experienced a greater increase in income from the previous reporting year compared to the non-recipients. In both subsamples, most were not currently employed.

On average, recipients had a significantly smaller net worth than the nonrecipients (\$23,187 compared to \$26,982, respectively). The mean

Table 1. Mean comparison of selected variables describing nonrecipients, recipients of family financial transfers

Variable	n ^a	Mean	Standard Deviation	t-value
Income (in dollars)	1775			
Nonrecipient	1707	5596	4522	3.28***
Recipient	68	4452	2729	
Change in income (in dollars, 1979 compared to 1977)	1695			
Nonrecipient	1630	495	2432	-0.78**
Recipient	65	669	1731	
Net worth (in dollars)	1376			
Nonrecipient	1321	26982	48057	0.76**
Recipient	55	23187	35493	
Windfall income (in dollars)	1853			
Nonrecipient	1786	151	1546	0.16
Recipient	67	137	636	
Cash Public Welfare (in dollars)	1827			
Nonrecipient	1760	230	595	2.17**
Recipient	67	123	387	
Education (in years)	1861			
Nonrecipient	1794	9.9	3.5	-0.34*
Recipient	67	10.1	3.1	
Persons in household	1878			
Nonrecipient	1810	1.7	1.2	-0.77
Recipient	68	1.8	1.4	

^aThe sample size varies due to missing data.

*Significant at .1 level.

**Significant at .05 level.

***Significant at .01 level.

Table 2. Cross-tabulations of nonrecipient, recipient subsamples by selected categorical variables

Variable	<u>Nonrecipient</u>		<u>Recipient</u>	
	n	percent	n	percent
Home ownership (n=1874 ^a)	1806	-	68	-
do not own	891	49.3	35	51.5
own	915	50.7	33	48.5
Current employment (n=1878 ^a)	1810	-	68	-
not employed	1541	85.1	55	80.9
employed	269	14.9	13	19.1
In-kind welfare (n=1878 ^a)	1810	-	68	-
did not receive	1537	84.9	59	86.8
received	273	15.1	9	13.2
Health compared to others (n=1722 ^a)	1657	-	65	-
same	776	46.8	30	46.2
better	611	36.9	25	38.5
worse	270	16.3	10	15.4
Health compared to past (n=1869 ^a)	1801	-	68	-
same	883	49.0	29	42.6
better	264	14.7	12	17.6
worse	654	36.3	27	39.7
Race (n=1878 ^a)	1810	-	68	-
other	259	14.3	9	13.2
white	1551	85.7	59	86.8
Current marital status (n=1878 ^a)	1810	-	68	-
never married	267	14.8	8	11.8
married	81	4.5	0	-
widowed	1184	65.4	51	75.0
divorced/separated	278	15.4	9	13.2

^aThe sample size varies due to missing data.

figure was potentially misleading, however, since it may be heavily skewed to the right by asset holdings of a few more affluent respondents.

The median figure provided a more realistic view of the women's assets. Recipients had a higher median net worth (\$8,340) compared to nonrecipients (\$8,000). In either case, the data indicated many elderly women had few financial resources to tap in the event of an abrupt decrease in income or emergency need. Substantial assets were generally represented by home ownership (about 50 percent in each subsample owned a home). Especially for the elderly, who generally have a strong desire to be housed independently in their own homes and leave an inheritance (Menchik & David, 1983, p. 688), equity in a home is a largely untapped resource.

Recipients tended to receive significantly less cash public welfare. This may be a function of the cash transfer from family members. Receipt of in-kind public welfare did not vary much from one subsample to another.

On the demographic variables, recipients had a slightly, yet significantly, higher educational level. Recipients were more likely to be widowed. None had remarried at the time of the 1979 interview. Race categories were about equally represented in both samples. Household size was not significantly different.

Testing the Prediction Equation

Given the results of the comparison between recipients and non-recipients, it was expected the financial variables would exhibit primary

predictive power. Multiple regression analysis was used to investigate this expectation.³ The small number of missing values on some variables were assigned to the mean.

As shown in Table 3, all references to health status, receipt of public welfare, and demographic variables were not significant. In fact, the posited model had little predictive power, as indicated by the nonsignificant overall F-test.

A reduced model entering only the current income and net worth variables into the prediction equation yielded a highly significant F-test. The adjusted R-square explained about 14 percent of the variability in the amount of financial transfers women received from family members.

Given the purpose of developing a prediction equation, the unstandardized b-values in the reduced model were of interest. For a \$100 increase in current income, the amount of the family transfer can be expected to increase about \$18; for a \$100 increase in net worth, the transfer decreases by less than \$1. The prediction equation and standard errors on the estimates were:

$$\begin{array}{rcll} \text{TRANSFERS} & = & 164.66 & + 0.175 \text{ INCOME} - 0.008 \text{ NET WORTH} \\ & & (218.69) & (0.049) \quad (0.004) \end{array}$$

³See the Appendix for the zero-order correlation matrix. Multicollinearity did not appear to be a problem. Further, residual analysis indicated the regression assumptions of linearity, equality of variance, and normality had not been unduly violated. Proceeding with regression analysis was appropriate.

Table 3. Regression analysis of financial transfers on selected independent variables (n = 68)

Independent Variables	Full Model			Reduced Model	
	Regression Coefficient	t	F-value	Regression Coefficient	t
current income	.15	1.85*		.175	3.55***
change in income	.06	.53			
net worth	-.01	-2.31**		-.008	-1.93*
windfall income	-.35	-1.62			
home ownership	424.02	1.47			
current employment	-64.17	-.19			
cash welfare	-.18	-.54			
in-kind welfare	314.95	.83			
health (compared to others):			1.88		
relatively better	138.66				
relatively worse	-707.67				
health (compared to past):			1.09		
better	-430.43				
worse	205.70				
education	-23.59	-.46			
persons in household	-39.69	-.39			
race	321.66	.73			
marital status:			.001		
widowed	5.83				
divorced/separated	25.13				
constant	245.28			164.66	
adjusted R-square	.089			.137	
F	1.385			6.32***	
df	17/50			2/65	

*Significant at .10 level.

**Significant at .05 level.

***Significant at .01 level.

The equation indicates an increase in transfers of \$164.83 can be expected from a \$1 increase in current income and a \$1 decrease in net worth. The 95 percent confidence interval for the regression coefficient on current income was 0.077 to 0.274 and for net worth, -0.017 to -0.0003. Due to the small sample size and limitations of the data in describing this cohort of women, extreme caution should be taken in assuming these values to be population parameters.

Note the opposite signs on the two significant financial variables. Both would be expected to be negative, indicating the greater the need, the more likely family members will share financial resources. Given the extremely small b-value on the net worth variable, a larger sample size could easily change the sign. Further, recall that the median net worth value was higher for recipients than for nonrecipients. Inspection of the standardized beta coefficients also indicates the net worth variable to be of lesser absolute importance as a predictor than current income (beta = -0.258 and 0.476, respectively).

The inverse relationship between income and the amount of transfers received is opposite the results of the logistic regression. However, the reader is cautioned against making such comparisons. The dependent variable used for the logistic technique, since it did not require reporting of actual dollar amounts, may have included an element of expectation for the respondent.

Discussion

Empirical knowledge about transfers of goods and services to elderly family members who are poorer is conclusive. However, this study indicates the same hypothesis may not be appropriate for financial transfers. Perhaps the concept of level of living (Davis, 1945, p. 2), rather than need, carries more weight for families giving money to elderly members.

Could it be that families are not willing to allow elderly members to retreat from their accustomed standards of living? The elderly person may have been financially comfortable at one time. But due to a variety of reasons (e.g., extended lifespan, erosion of purchasing power of savings, a commitment to leave a sizable inheritance), her disposable income may not be at the level needed for life style maintenance. Family members, especially adult children, expect the elderly person to maintain the level of living enjoyed through life, and subsidize her income to that end.

Studying both the giver and receiver could shed light on this question. It could be that the giver provides financial assistance both out of family responsibility and perhaps the selfish desire to protect illiquid assets for inheritance later. As Powers et al. (1981) reported, higher-income elderly also are more likely to expect financial help from the family, rather than the government.

Further, the giver with sufficient financial resources, may prefer giving money to help elderly family members rather than provide time-intensive goods and services. Becker (1981) emphasizes the net gain to a

family as a result of an altruistic act. Could it be that a richer adult child is more likely to share cash than provide in-kind transfers that take time away from money-making endeavors? The influx of businesses to coordinate services for the elderly lends credence to this potential substitution effect.

There is an obvious void in knowledge about the magnitude of direct financial transfers among family members. This study indicates policy makers concerned with maintenance of an acceptable level of living for elderly persons may need to be more concerned about the dollar value of goods and services than financial transfers from family members. On the other hand, could public policy (in addition to the income tax credit for care of dependents) encourage families to bear more of the burden for caring for their own?

The "family versus social responsibility" issue also has implications for family educators, especially family economists and family life specialists. Should adult children, for example, jeopardize future financial security for themselves and their children by helping elderly parents? In the case of reconstituted families, who takes responsibility for caring for elderly relatives? As pressures on government transfer systems increase and the elderly population grows proportionately in numbers, these questions will assume more pertinence.

SUMMARY

The overall purpose of this dissertation was to investigate the economic position of elderly women. Of specific interest were two private mechanisms whereby elderly women might improve their financial situation in retirement -- prior labor force attachment and direct financial transfers from family members.

The study consisted of two parts. The first sought to substantiate the impact of a woman's labor force attachment on her contribution to financial resources in retirement. The second had as its goal to develop a model to predict characteristics of an elderly woman as a recipient of financial transfers from family members.

The data used in this research were from the Social Security Administration's Longitudinal Retirement History Study. A national sample of 11,153 persons comprised of men, regardless of marital status, and women of the same ages who were not married when selected, was first interviewed in 1969. All respondents were age 58-63 when first interviewed and re-interviewed biennially through 1979. Due to this study's focus on retirement-aged women, the sample was reduced to the 1,878 elderly women responding to the 1979 wave. They would have been age 68-73 at that time.

Labor Force Attachment

To assess the effect of prior labor force attachment on a woman's contribution to economic well-being in retirement, a dependent variable called "woman's own contribution ratio" was constructed. By assigning

income and asset information reported for the respondent only (including Social Security and private pension benefits earned in her own name) to the numerator and the same information for the respondent and spouse collectively to the denominator, a ratio ranging from zero to one resulted.

A regression model posited that this ratio was a function of labor force attachment, type of occupation, and selected demographic variables of education, marital status, and race. Due to missing income data that could not be appropriately estimated, the sample was reduced to 1,003 women from the original 1,878.

The variables of labor force participation, marital status, and race were significant in explaining the woman's own contribution ratio. Supporting the purpose of the research, the labor force participation indicator was positively related to the dependent variable.

Marital status had the most explanatory power. Congruent with information about the inadequacy of survivor's benefits, it was observed that widowed women had the highest ratio of all marital statuses. The ratio was lower for divorced and separated respondents and lowest for married women.

Primary implications were that women are creators of their own financial destinies during the last life cycle stage. It was suggested the best safeguard for women against poverty in retirement may be an investment in and use of personal human capital. Implications also were made for educators as they impact women's family and career choices, public policy makers as they consider the maintenance of an acceptable

level of living for elderly women, and for researchers to more accurately define the own contribution ratio.

Family Financial Transfers

Study of elderly women as recipients of financial transfers from family members was accomplished by dichotomizing the sample of 1,878 women by those who reported receipt of financial transfers from those who reported none. Consistent with previous findings on the frequency of financial transfers from family members to older relatives, only 68 women reported an actual dollar amount received.

Using cross-tabulation and t-tests, the recipient group was compared to the nonrecipient group on selected variables. Recipients had slightly lower incomes and higher median net worths, received less cash public welfare, and were more likely to be widowed than nonrecipients.

The sample of 68 recipients was used for the regression analysis. The model posited that the recipient of money from family members by an elderly women could be predicted by her current income, a recent change in income, net worth, windfall income, home ownership, current employment, receipt of public welfare, health status, household composition, and selected demographic variables. In the predictive model, only current income and net worth were significant in describing a recipient of financial transfers from family members.

The relationship between current income and receipt of financial transfers was positive. This provided empirical basis for questioning the

generally accepted hypothesis that transfers between family members are need-based alone.

Research recommendations focused on studying both the giver and receiver of a family financial transfer and gaining more knowledge about the magnitude of direct financial transfers among family members. Implications were also made for educators as they help families with elderly members deal with the "family versus social responsibility" issue, and for public policy makers as they consider comprehensive approaches to income equity.

Recommendations and Implications

Discussions about how best to provide for old age have never been more widespread, except perhaps during the Social Security debates early in this century. Although persons 65 years and older now enjoy higher incomes and more economic security than those in previous age cohorts, elderly women still remain among the most disadvantaged in American society. The feminization of poverty reaches deep into the aged ranks and makes the economic, social, and emotional problems of the elderly mostly women's problems.

Current and predicted trends ensure these problems will remain wanting of solutions far into the future. Escalating health care costs, the baby boom phenomenon, the mixed blessing of longevity (Hamermesh, 1984), and increased expectations for quality retirement years lived without dependence all have relevance.

This study has increased knowledge and recognition of two mechanisms whereby a woman's economic well-being might be enhanced during the last life cycle stage. Findings from both the labor force participation and family financial transfers reports have relevance for researchers, public policy makers, educators, and families. This section highlights implications for these sectors that surfaced during the research process.

Research

Research that uses an established data base often has limitations beyond the control of the investigator. This affected both objectives in the present study in at least three ways:

- (1) Due to the selection procedure, the sample of elderly women was nonrepresentative of the population. A more representative sample, specifically not heavily weighted with widowed women, would allow generalizations about the entire population.
- (2) Only one cohort of women is represented. Research comparing cohorts may find differences in attitudes toward saving for retirement and the right time to retire, for example.
- (3) Cross-sectional analysis of a specific wave of longitudinal data poses limitations. An accumulated nonresponse rate as the longitudinal study runs its course hinders the study's ability to represent persons originally sampled. Taking advantage of the longitudinal nature of the data to follow women through the 10-year data collection period would be of empirical interest. In addition to these general recommendations,

several suggestions for further research can be made for the two areas studied in this dissertation. Each is discussed separately.

Labor force participation By use of primary data, a researcher could get a more accurate record of labor force participation. Of particular interest would be the effect of part-time versus full-time, intermittent versus continuous, and seasonal versus year-round employment on the own contribution ratio. In addition to years of employment, how do these varying work patterns affect a woman's ability to make direct contributions to economic well-being in retirement?

Further refinement of a comprehensive measure of economic well-being and its application to a woman's own contribution ratio is necessary. Access to Social Security records, more detailed information about qualifications for pension coverage, and indications of wives' direct contributions to asset accumulation would remove some of the biases in this ratio.

Information about marital status throughout life also would be informative. For example, without adequate financial protection for survivors, it would be expected the longer the widowhood, the greater the need for labor force participation.

Finally, the reporting problem on income and asset data needs attention. How can studies be designed to obtain this essential information? Without actual or accurate responses, what estimation techniques can best fill in unanswered blanks or make adjustments?

Family financial transfers Elderly women as recipients of financial transfers from family members could be better understood by

taking advantage of the longitudinal nature of a data set. How do such transfers vary in light of increasing age, emergency needs, and drastic changes in income? How do family grants effect lifelong economic well-being?

More attention must be paid to characteristics of both the giver and receiver of a financial transfer. What is the income elasticity of transfers (Moon, 1977) for both? How does transfer activity differ for generations "in the middle" with responsibilities for both aging parents and own children (Morgan, L. A., 1983) as compared to generations with felt commitments for only one age group?

Testing the accuracy of conceptual models describing family financial contributions over the life cycle also is needed. Sociologists debate the curvilinear model of family transfers, which views aging as a time of role reversal, versus the continuity model, which suggests the elderly continue to transfer money to children (Cheal, 1983). Knowledge of which model is more likely to be descriptive of the population has implications for public policy and private family financial planning.

Public Policy

Although the United States has a basic system for providing retirement income, it is by no means perfect. Still of concern are elderly persons with incomes solely from Social Security, the precarious economic stance of widows, and the plight of workers with inadequate or inequitable private pensions. This research suggests public policy makers pay more attention to sex equity in Social Security and private pension

systems. As women continue to join the labor force in unprecedented numbers, how can they be assured part of their earnings will be applicable to retirement security?

On the issue of transfers among family members, are policy makers fully aware of the advantages and disadvantages of substituting government programs for private assistance? If legislation is forwarded to make adult children legally, in addition to morally, obligated to care for aging parents, is the security of future retirees jeopardized? Do we want to enforce a parental-support requirement on a 55-year-old son or daughter who still may have the legal obligation to support a teen-age child?

Conversely, many people believe America already spends too much money on its elderly, perhaps at the expense of better care for the nation's children. Policy makers must take all segments of society into consideration before legislating care of the elderly into the arms of families.

Education

Through classroom and Extension outlets, preventative education can help young women learn how to prepare now for financial security in retirement. Understanding pension options (both Social Security and private) and the demographic, economic, and social conditions of women is necessary for personal financial planning.

Educators can sensitize families to upcoming decisions about caring for elderly members. Issues of importance are the "generational squeeze" where support is demanded by generations on both sides of the giver, the

confusion over familial responsibility in reconstituted families, and government incentives already in place for such care (such as the dependent care tax credit).

Educators themselves and the people with whom they work must be aware of public policy issues related to economic well-being of elderly women and voice concerns and support. For example, family economists can not only educate women about pension equity but also affect public affairs to that end.

Finally, educators have a responsibility to keep issues related to the elderly in perspective, especially in the popular media. They can emphasize the importance of viewing the elderly as having many distinct parts rather than as a homogeneous entity. For example, to report the elderly as disadvantaged is incorrect; to say elderly women, especially those 75 and older, are disadvantaged is correct.

As another example, consider the well-known effect of the declining birth rate on the number of children to give elderly parents support. This is true in the long run, but in the next few decades the parents of the postwar baby boom will reach retirement age. Temporarily, it will be the case that more children are available to help elderly parents. Conclusions about increases in intergenerational family support will, on average, likely be inaccurate.

Personal Applications

The headline under a retirement planning article is blunt -- "More of your income will come from you" ("Retirement Planning," January 1984, p.

82). With the onset of Social Security benefits in the United States, many writers spoke of the three-legged stool of retirement security. Of course, Social Security and private pensions occupied two legs. The third and essential leg for staying comfortably seated during retirement was personal savings.

It's clear the overwhelming bulk of the population does not save adequately for retirement. Most wealth is tied to home equity not readily or easily converted to retirement cash. Many people avoid planning until retirement is almost a reality.

The availability of Individual Retirement Accounts has sensitized the American public to the importance of retirement planning. Yet few realize that the economics of aging begins quite early in life (Schulz, 1985, p. 182). This is especially the case for women. Either due to socialization toward dependency on men or the lack of perceived need for financial astuteness, women in general are far too complacent about finances. They have a responsibility, as creators of their own financial destinies, to make appropriate decisions about labor force attachment, understand and participate in family financial planning, and pay special attention to means for meeting financial needs in retirement.

REFERENCES CITED

- Ando, A., & Modigliani, F. (1963). The "life cycle" hypothesis of saving: Aggregate implications and tests. American Economics Review, 53(1), 55-84.
- Baerwaldt, W. A., & Morgan, J. N. (1973). Trends in interfamily transfers. In L. Mandel (Ed.), Surveys of Consumers, 1971-72. Ann Arbor, Michigan: Institute of Social Research.
- Becker, G. S. (1981). A treatise on the family. Cambridge, Massachusetts: Harvard University Press.
- Bivens, G. E. (1976). The grants economy and study of the American family: A possible framework for trans-disciplinary approaches. Home Economics Research Journal, 5, 70-78.
- Bivens, G. E., & Volker, C. B. (1983). Value added through meal preparation in U.S. households: The younger, newly old, and older old. In K. D. Rettig, & M. Abdel-Ghany (Eds.), Proceedings of Family Economics/Home Management Section of the American Home Economics Association. (pp. 113-121). Washington, DC: American Home Economics Association.
- Boulding, K. E. (1973). Economy of love and fear. Belmont, California: Wadsworth Publishing.
- Caution: Women at work. (April 1984): American Demographics, 11.
- Cheal, D. J. (1983). Intergenerational family transfers. Journal of Marriage and the Family, 45, 805-813.
- Chiswick, B. R., & O'Neill, J. A. (1977). Human resources and income distribution: Issues and policies. New York: W. W. Norton.
- Cicirelli, V. G. (1981). Helping elderly parents: The role of adult children. Boston, Massachusetts: Auburn House Publishing.
- Clark, R. L., & Sumner, D. A. (1985). Inflation and the real income of the elderly: Recent evidence and expectations for the future. The Gerontologist, 25(2), 146-152.
- Corbett, R. B., Fethke, C., & Hauserman, N. R. (1980). Achieving economic justice for homemakers. Journal of Home Economics, 72(2), 17-24.

Danziger, S., & Taussig, M. (1977). Conference on the trend in economic inequality in the United States (Report No. 11). Madison, Wisconsin: Institute for Research on Poverty.

Danziger, S., van der Gaag, J., Smolensky, E., & Taussig, M. (1984a). Implications of the relative economic status of the elderly for transfer policy. In H. Aaron, & G. Burtless (Eds.), Retirement and Economic Behavior (pp. 175-196). Washington, DC: The Brookings Institution.

Danziger, S., van der Gaag, J., Smolensky, E., & Taussig, M. (1984b). Income transfers and the economic status of the elderly. In M. Moon (Ed.), Economic Transfers in the United States (pp. 239-282). New York: The National Bureau of Economic Research.

Davis, J. (1945). Standards and content of living. American Economic Review, 35(1), 1-15.

Duesenberry, J. S. (1949). Income, saving and the theory of consumer behavior. Cambridge, Massachusetts: Harvard University Press.

Fergusson, D. M., Horwood, L. J., & Beautrais, A. L. (August 1981). The measurement of family material well-being. Journal of Marriage and the Family, 43, 715-724.

Fox, A. (1979). Earnings replacement rates of retired couples: Findings from the Retirement History Study. Social Security Bulletin, 42(1), 17-39.

Friedman, M. (1957). A theory of the consumption function. Princeton, New Jersey: Princeton University Press.

Friedman, J., & Sjogren, J. (1981). Assets of the elderly as they retire. Social Security Bulletin, 44(1), 16-31.

Fuchs, V. R. (1983). How we live: An economic perspective on Americans from birth to death. Cambridge, Massachusetts: Harvard University Press.

Gordon, N. M. (1979). Institutional responses: The Social Security system. In R. E. Smith (Ed.), The Subtle Revolution: Women at Work. Washington, DC: The Urban Institute.

Goudy, W. J. (1982). The Retirement History Study: Two methodological examinations of the data (Report No. 151). Ames, Iowa: Department of Sociology and Anthropology, Iowa State University.

- Hamermesh, D. S. (September-October 1984). The costs of increased life expectancy, Challenge, 55-57.
- Health care expenditures for the elderly. (1984). Family Economics Review (No. 3), 21.
- Henretta, J. C., & O'Rand, A. M. (1980). Labor force participation patterns of older married women. Social Security Bulletin, 43(8), 10-16.
- Ireland, L., Motley, D., Schwab, K., Sherman, S., & Murray, J. (1976). Almost 65: Baseline data from the retirement history study. (USDHEW Res. Rep. No. 49). Washington, DC: U.S. Government Printing Office, 1976.
- Ireland, L., & Schwab, K. (1981). The Social Security Administration's Retirement History Study. Research on Aging, 3, 381-386.
- Juster, F. T. (March 1981). Current and prospective financial status of the elderly population. Institute for Social Research Working Paper Series. Ann Arbor, Michigan: Institute for Social Research.
- Keating, N., & Jeffrey, B. (1983). Work careers of ever married and never married retired women. The Gerontologist, 23(4), 416-421.
- Kreps, J. M. (1965). The economics of intergenerational relationships. In E. Shanas, & G. F. Streib (Eds.), Social Structure and the Family: Generational Relations. Englewood Cliffs, New Jersey: Prentice-Hall.
- Kreps, J. M. (1971). Lifetime allocation of work and income. In Essays in the Economics of Aging. Durham, North Carolina: Duke University Press.
- Kyrk, H. (1953). The family in the American economy. Chicago: The University of Chicago Press.
- Kyrk, H. (1923). A theory of consumption. Boston: Houghton Mifflin.
- Lampman, R., & Smeeding, T. M. (1983). Interfamily transfers as alternatives to government transfers to persons. The Review of Income and Wealth, 29, 45-66.
- Marshall, A. (1949). Principles of Economics (3rd ed.). New York: McMillan.

- Menchik, P. L., & David, M. (1983). Income distribution, lifetime savings, and bequests. American Economic Review, 73(4), 672-690.
- Miller, D. (August 24, 1981). The "feminization" of poverty: Women and proposed Social Security Cuts. Washington Social Legislation Bulletin. Washington, DC: Social Legislation Information Service.
- Mincer, J., & Polachek, S. W. (1974). Family investment in human capital: Earnings of women. Journal of Political Economy, 82, S76-S108.
- Mirer, T. W. (1980). The dissaving behavior of the retired aged. Southern Economic Journal, 46, 1197-1205.
- Moon, M. (1977). The measurement of economic welfare: It's application to the aged poor. New York: Academic Press.
- Moon, M. (1983). The role of the family in the economic well-being of the elderly. The Gerontologist, 23, 45-50.
- Morgan, J. N., David, M., Cohen, W., & Brazer, H. (1962). Income and welfare in the United States. New York: McGraw-Hill.
- Morgan, J. N. (1978). Intra-family transfers revisited: The support of dependents inside the family. In G. J. Duncan, & J. N. Morgan (Eds.), Five Thousand American Families -- Patterns of Economic Progress (pp. 347-365). Ann Arbor, Michigan: Institute for Social Research.
- Morgan, J. N. (1983). The redistribution of income by families and institutions and emergency help patterns. In G. J. Duncan, & J. N. Morgan (Eds.), Five Thousand American Families -- Patterns of Economic Progress (pp. 1-59). Ann Arbor, Michigan: Institute of Social Research.
- Morgan, L. A. (1983). Intergenerational financial support: Retirement-age males, 1971-1975. The Gerontologist, 23, 160-166.
- Peck, C. J., & Webster, G. (1985). Women and pensions. Journal of Home Economics, 77(1), 10-15, 37.
- Powers, E. A., Keith, P. M., & Goudy, W. J. (1981). Family networks of the rural aged. In R. T. Coward, & W. M. Smith (Eds.), The Family in Rural Society. Boulder, Colorado: Westview Press.
- Projector, D., & Weiss, G. (1969). Income-net worth measures of economic welfare. Social Security Bulletin, 32, 14-17.

- Quinn, J. F. (1983). Problems and issues in relation to economic security for the elderly. In K. D. Rettig, & M. Abdel-Ghany (Eds.), Proceedings of Family Economics/Home Management Section of the American Home Economics Association. (pp. 2-35). Washington, DC: American Home Economics Association.
- Radner, D. B. (1982). Distribution of family income: Improved estimates, Social Security Bulletin, 45, 13-21.
- Retirement planning: More of your income will come from you. (January 1984). Changing Times, 85-89.
- Rich, S. (August 19, 1983). "Survey shows elderly exceed average income, Washington Post, pp. A1, A3.
- Ross, C. (1984). Income transfers and the relative economic status of the elderly, 1967, 1974, and 1981. Discussion Paper of the Institute for Research on Poverty, (No. 760-84), University of Wisconsin, Madison.
- Ruffin, M. D. (1984). Contribution of the family to the economic support of the elderly. Family Economics Review, 4, 1-11.
- Schulz, J. H. (1985). The economics of aging (3rd ed.). Belmont, California: Wadsworth Publishing.
- Schulz, J. H. (1980). The economics of aging (2nd ed.). Belmont, California: Wadsworth Publishing.
- Shanas, E. (1982). National Survey of the Aged (DHHS Pub. No. OD145 83-20425). U.S. Department of Health and Human Services: Administration on Aging.
- Smith, M. M., & Olson, P. N. (1984). Interfamily transfers to beginning and elderly families. Home Economics Research Journal, 13(2), 184-191.
- Upp, M. (1983). Relative importance of various income sources of the aged, 1980. Social Security Bulletin, 46, 3-10.
- U.S. Bureau of the Census. (1983a). America in transition: An aging society. Current Population Reports (Series P-23, No. 128). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1983b). Statistical Abstract of the United States: 1984 (104th ed.). Washington, DC: U.S. Government Printing Office.

- U.S. Bureau of the Census. (1984). Lifetime work experience and its effect on earnings: Retrospective data from the 1979 Income Survey Development Program. Current Population Reports (Series P-23, No. 136). Washington, DC: U.S. Government Printing Office.
- U.S. Congress, House Select Committee on Aging. (1982). Problems of aging women (Hearing, 97th Congress, 2nd Session, Omaha, Nebraska Comm. Pub. 97-363). 133.
- Weisbrod, B. A., & Hansen, W. L. (1968). An income-net worth approach to measuring economic welfare. American Economic Review, 58, 1315-1329.
- White House Conference on Aging. (1982). Final Report (Vol. 1). Washington, DC: U.S. Government Printing Office.

APPENDIX

	Page
Section I. Zero-order Correlation Matrix	88
Section II. Zero-order Correlation Matrix	89

Section I. Zero-order correlation matrix (n = 1003)

	1	2	3	4	5	6	7	8	9	10
1. own contri- bution ratio	1.000									
2. labor force participation indicator	.085	1.000								
marital status:										
3. married	-.347	.011	1.000							
4. divorced	-.362	-.009	-.086	1.000						
5. separated	-.215	-.018	-.043	-.084	1.000					
occupation:										
6. professional/ managerial	.035	.215	.008	-.041	-.037	1.000				
7. clerical/ sales	.032	.209	.024	.066	-.043	-.145	1.000			
8. blue collar	-.021	.132	-.022	.030	.048	-.247	-.300	1.000		
9. education	-.044	.095	.000	.101	-.104	.302	.248	-.189	1.000	
10. race	-.016	-.052	.066	.054	-.210	.120	.180	-.201	.281	1.000

Section II. Zero-order correlation matrix (n = 68)

	1	2	3	4	5	6	7	8
1. transfers	1.000							
2. education	.108	1.000						
3. race	.179	.406	1.000					
marital status								
4. widowed	.099	-.038	-.025	1.000				
5. div/sep	-.037	-.082	.024	-.676	1.000			
6. current empl.	.147	.071	-.031	.108	-.080	1.000		
7. current inc.	.339	.366	.213	.043	.059	.271	1.000	
health compared to others								
8. better	.077	.207	-.062	-.123	-.028	.172	.312	1.000
9. worse	-.159	-.120	.162	-.048	.205	-.202	-.085	-.317
health compared to past								
10. better	-.171	-.202	-.047	-.089	-.181	-.029	-.152	.287
11. worse	.085	-.063	.140	.121	.127	-.012	.003	-.307
12. own home	.105	.211	.206	.085	-.119	-.023	.150	-.008
13. cash welfare	-.128	-.304	-.035	.018	.090	-.037	-.237	-.141
14. in-kind welfare	.047	-.165	.024	.125	-.024	.031	-.137	-.028
15. change in income	.275	.213	.078	-.013	.167	.064	.697	.152
16. net worth	-.006	.390	.181	-.077	.122	.062	.530	.150
17. windfall income	-.111	.041	-.242	.054	-.069	-.104	.137	.236
18. persons in household	-.104	-.191	.061	-.203	.327	-.026	-.214	.020

9	10	11	12	13	14	15	16	17	18
1.000									
-.192	1.000								
.427	-.376	1.000							
-.071	.091	.054	1.000						
.130	.142	.162	-.003	1.000					
.083	.047	.127	-.206	.013	1.000				
-.029	-.192	.057	.181	-.040	-.272	1.000			
-.130	-.014	-.058	.444	-.172	-.145	.366	1.000		
-.046	-.083	.078	.095	-.071	-.073	.130	.017	1.000	
.042	.052	-.059	-.225	.187	.036	-.127	-.209	-.115	1.000